

Thinking About MAOIs Again

Over the past year or so I have noticed several articles on monoamine oxidase inhibitors (MAOIs). This is interesting to me because for years it seemed as if these drugs were ‘dead in the water’. I have met physicians who have never prescribed an MAOI and had that observation confirmed by articles stating the same.

MAOIs were the first antidepressants “discovered”. By discovered, I mean they were observed to be mood enhancing while being used in the treatment of tuberculosis. In fact, the original categorization of these drugs was not “antidepressant” but “mood elevator”. The history of MAOIs is fascinating, their use in TB sanitariums being traced to leftovers from unused rocket-fuel ingredients from World War II. *

I was introduced to MAOIs in the state hospital where I spent my formative years in nursing. The concept of serotonin syndrome hadn’t been identified then. In fact, my first awareness of serotonin syndrome occurred in the autopsy room. A neuropathologist pointing to a brain being readied for dissection said, “Norm, this woman died from serotonin syndrome.” I replied that I had never heard of serotonin syndrome to which she countered, “I haven’t either.” That led to, what I believe was, the first article on serotonin syndrome published in a nursing journal. I will not retell that tragic story, but in brief she had been prescribed an SSRI by a new physician when she was already taking an MAOI.

All that said, I take the rekindling of interest in MAOIs as a reinforcement of the prevailing wisdom of older psychiatrists I knew- namely that MAOIs were good and maybe even the best antidepressants albeit without some risks. Given that less than 50% of depressed patients achieve remission on one drug, it is understandable that other options would be explored. Further, since only MAOIs enhance the intrasynaptic availability of all three major neurotransmitter culprits in depression (i.e. serotonin, norepinephrine, & dopamine) such interest seems warranted.

The biggest problems, I think, in prescribing MAOIs is concern about interactions with other drugs and/or foods containing tyramine. The drug interactions are real but can be managed with appropriate prescribing and patient education. If drugs are contraindicated they need to be discontinued. Principles for the prescriber to understand include the fact that some drugs need to be tapered while others don't. Further, contraindicated drugs must be out of the system and that is where a good understanding of basic pharmacokinetics is important. As far as the food interactions go, in all of my years I do not remember a food interaction with MAOIs. That does not mean they are not real or important. Also, it could be that some level of interaction occurred but was not brought to the attention of the staff. Lastly, I may have just missed it.

It will be interesting to see if MAOIs make some level of comeback. I suspect they will but probably a small one.

*I will mention a couple of articles that were very interesting and helped me write this brief essay:

Meyer, J.M. (2017). A concise guide to monoamine oxidase inhibitors. *Current Psychiatry*, 16(12), 15.

Meyer, J. M. (2018). Avoiding drug interactions when prescribing MAOIs. *Current Psychiatry*, 17 (1), 22.